BIOSPECTRA
Bulk cGMP Fine Chemical Manufacturer

EXCIPIENT
ICH Q7 GMP MANUFACTURED PRODUCT

MES MONOHYDRATE

BET*, LEI**, GMP

CAS #: 145224-94-8 **Formula: $C_6H_{13}NO_4S \cdot H_2O$** **F.W.: 213.25 g/mol**

MESM-3250

BIO EXCIPIENT GRADE

ANALYSIS		SPECIFICATIONS
Absorbance (1M)	260 nm 280 nm	< = 0.1000 a.u. < = 0.1000 a.u.
Appearance and Color		White Crystals
Assay		> = 99.5%
Chloride		< = 50 ppm
Color (1M, Alkaline)		Colorless
Endotoxin		< 50 EU/g
Enzymes	DNase RNase Protease	None Detected None Detected None Detected
Identification, IR		Conforms to Reference Standard
Loss on Drying, 130˚C		7 – 9%
Microbial Content	TAMC TYMC	< = 100 CFU/g < = 100 CFU/g
pH (5%)		3.1 – 3.5
pH (0.5M)		2.5 – 4.0
pK_a		5.9 – 6.3
Residue on Ignition		< = 0.05%
Solubility (5%)		Passes Test
Sulfate		< = 50 ppm
Trace Metals	Arsenic (As) Antimony (Sb) Barium (Ba) Cadmium (Cd) Cobalt (Co) Copper (Cu) Chromium (Cr) Iron (Fe) Lead (Pb) Lithium (Li) Mercury (Hg) Molybdenum (Mo) Nickel (Ni) Tin (Sn) Vanadium (V)	< = 1.5 ppm < = 9 ppm < = 70 ppm < = 0.2 ppm < = 0.5 ppm < = 30 ppm < = 110 ppm < = 2 ppm < = 0.5 ppm < = 25 ppm < = 0.3 ppm < = 150 ppm < = 2 ppm < = 60 ppm < = 1 ppm
Water, KF		7.8 – 8.9%

*Bioburden and Endotoxin Tested **Low Elemental Impurities

General Product Overview

MES Monohydrate is a zwitterionic buffer that is not absorbed through cell membranes and is virtually transparent in UV light. MES is a buffering agent used in many biological and biochemical applications. It is also used as a running buffer for denaturing gel electrophoresis. The characteristics of low UV absorptivity, minimal reactivity, stable pH and solubility in water allow MES Monohydrate to be a Good's buffer.

Industry Application

Suitable for use as a cGMP chemical in pharmaceutical manufacturing processes and products.

Key Product Features

- The manufacturing of MES Monohydrate, MESM-3250 is performed at BioSpectra's Bangor, PA facility.
- Appears as white crystals
- Manufactured in accordance with ICH Q7
- Manufactured in an enzyme free, hormone free and animal free environment.
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives
- Is not subject to genetic modification
- Synonyms: 2-(N-Morpholino) Ethane Sulfonic Acid, 4-Morpholineethanesulfonic Acid Monohydrate

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf-Life Policy

Unless otherwise noted on the Shelf-Life Statement and CoA, this product has a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

Package Sizes

10kg, 25kg and 50kg

Click here to view SDS, CoAs and other supporting regulatory documents on our website.